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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/783,779

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Yu Gong

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05/01/2008

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EXAMINER

HARPER, LEON JONATHAN

ART UNIT

PAPER NUMBER

2166

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/783,779	Applicant(s) GONG, YU	
	Examiner Leon J. Harper	Art Unit 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 78-99 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 78-99 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/17/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed 1/24/2008 has been entered. No claims have been added or cancelled. No claims have been amended. Accordingly, claims 78-99 are pending in this office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 78-99 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5890167 (hereinafter Bridge) in view of US 20040034615 (hereinafter Thom).

As for claim 78 Bridge discloses: receiving, from a user, input that selects a plurality of database objects to be transported from a source database to a target

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database (See column 7 lines 23-27 and See column 6 lines 40-44). While Bride does not substantially differ from the claimed invention the disclosure of, wherein the plurality of database objects includes at least one of: a view, a sequence, a dimension, a cube, an ETL mapping, a queue, an external table, a stored procedure, or a database object, wherein the metadata for the database object is stored outside of the source database and the target database; reading metadata about each selected object to determine a manner in which to transport the selected objects to the target database; storing meta-metadata that indicates the manner in which to transport the selected objects to the target database; and based on the meta-metadata, performing operations to transport the selected objects to the target database. Thom however does explicitly disclose wherein the plurality of database objects includes at least one of: a view, a sequence, a dimension, a cube, an ETL mapping, a queue, an external table, a stored procedure, or a database object, wherein the metadata for the database object is stored outside of the source database and the target database; reading metadata about each selected object to determine a manner in which to transport the selected objects to the target database; storing meta-metadata that indicates the manner in which to transport the selected objects to the target database; and based on the meta-metadata, performing operations to transport the selected objects to the target database. (See paragraph 0009).). It would have been obvious to an artisan of ordinary skill in the pertinent art to have incorporated the teaching of Thom into the system of Bridge. The modification would have been obvious because users want to have the ability to extract and translate

databases from one form to another (See Thom paragraph 0011).

As for claim 79 the rejection of claim 78 is incorporated and further Thom discloses in response to a failure occurring during the transport of any of the selected objects to the target database, rolling back all changes made during the transport of the selected objects to the target database (See paragraph 0066).

As for claim 80 the rejection of claim 78 is incorporated and further Thom discloses wherein the selected objects includes a database object that has metadata stored outside of the source database, and further wherein reading the metadata includes reading the metadata from a source repository outside of the source database (See paragraphs 0151-0153).

As for claim 81 the rejection of claim 80 is incorporated and further Thom discloses: wherein a source database server manages data from the source database, a target database server manages data from the target database, and the source repository is a repository associated with an application separate from both the source database server and the target database server (See paragraphs 0037,0046,0054).

As for claim 82 the rejection of claim 81 is incorporated, and further Thom

discloses: wherein the application is an extraction, transformation and loading application (See paragraph 0009)

As for claim 83 the rejection of claim 78 is incorporated, and further Thom discloses: wherein reading metadata about each selected object includes reading metadata from the source database (See paragraph 0095).

As for claim 84 the rejection of claim 78 is incorporated, and further Thom discloses: analyzing the metadata about each selected object for dependencies (See paragraph 0009).

As for claim 85 the rejection of claim 84 is incorporated, and further Thom discloses: wherein analyzing the metadata for dependencies includes analyzing the metadata to ensure proper order of loading of the metadata into the target database.(See paragraph 0046, 0107).

Claims 86-93 contain essentially the same limitations as claims 78-85 and are thus rejected for the same reasons as claims 78-85.

Claims 94-99 contain essentially the same limitations as claims 78-80,83-84 and are thus rejected for the same reasons as claims 78-80,83-85.

Response to Arguments

Applicant's arguments filed 1/24/2008 have been fully considered but they are not persuasive.

Applicant argues:

A fundamental difference between Bridge and claim 78 is that in Bridge, only tablespaces maybe selected for transport and only the entire tablespace is transported, while in Claim 78, specific objects are selected to be transported, without requiring the entire tablespace be transported. In Bridge, an entire tablespace is selected when a "user 'unplugs' a set of tablespaces...containing the desired data." (col. 6, lines 52- 55) "The user may then 'plug' the set of tablespaces into a target database by issuing a plug-in command " (col. 7, lines 8 - 11) Bridge fails to disclose in any way selecting specific objects to be transported, without requiring the entire tablespace to be transported.

Examiner responds:

Examiner is not persuaded. input that selects a plurality of database objects to be transported from a source database to a target database Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. Interpretation of Claims-Broadest Reasonable Interpretation During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969). In this case the claim limitation in question reads,

“input that selects a plurality of database objects to be transported from a source database to a target database” as long as the input selects a plurality of database objects to be transported then any additional information sent is irrelevant. Therefore While applicant has argued a “fundamental difference” this fundamental limitation is not a claimed limitation.

Applicant argues:

Another fundamental difference is that claim 78 requires meta-metadata. Meta-metadata "indicates the manner in which to transport the selected objects to the target database." Bridge does teach about "metadata". In Bridge, "Metadata is information about data in a database, such as data dictionary information about what tables are in the database, what columns a table has, what indexes have been built for a table, and so forth. Metadata describes objects in the database, and these objects may contain disk pointers." (column 3, lines 51 - 55). However, metadata in Bridge fails to "indicate... the manner in which to transport the selected objects to the target database," as does the meta- metadata of claim 78. The metadata of Bridge is not the meta-metadata of claim 78.

Clearly, an OLAP database system involves transferring data (or data computed there from) that is stored in database objects (e.g. table) of a relational database to an OLAP system. However, there is no discussion that database objects themselves are transported between database systems, as claim 78 requires, much less a discussion

about meta-metadata that indicates the manner in which to transport the selected objects to the target database, as claimed.

Examiner responds:

Examiner is not persuaded. Reference is made to MPEP 2144.01 - Implicit Disclosure “[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968) In this case Thom discloses that metadata is used for building joins, column data type information, and building virtual columns etc. Moreover, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues:

Rolling back a database-to-database transport of user selected objects is not taught or suggested by any of the cited references. This feature is not suggested in any way much less disclosed by the cited art.

Examiner responds:

Examiner is not persuaded. Reference is made to MPEP 2144.01 - Implicit Disclosure "[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968) . In this case Thom discloses that there are no restrictions post transport including rolling back.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon J. Harper whose telephone number is 571-272-0759. The examiner can normally be reached on 7:30AM - 4:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LJH
Leon J. Harper
April 26, 2008

/Hosain T Alam/

Supervisory Patent Examiner, Art Unit 2166